## K-543

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# **MSCZO-503**

#### ANIMAL PHYSIOLOGY AND ENDOCRINOLOGY

M.Sc. Zoology (MSCZO)

1st Semester Examination, 2023 (Dec.)

Time: 2 Hours] Max. Marks: 70

Note: This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

#### **SECTION-A**

(Long Answer Type Questions)

**Note:** Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 19 = 38)$ 

- 1. Give an account on the nutritive patterns of animal depending on the source of energy and nature of food.
- **2.** Write an account on the hormones involved in the regulation of digestion in mammals.
- **3.** Write an account on neurotransmitters.
- **4.** Give an account on molecular mechanism of muscle contraction.
- **5.** Describe the structure of pituitary and explain the role hormones secreted by it.

#### **SECTION-B**

### (Short Answer Type Questions)

**Note:** Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

- 1. Describe the various factors affecting blood pressure.
- **2.** Explain the survival mechanism in poikilotherms and homeotherms.
- **3.** Write the physiological action of Insulin.

- **4.** Write the name of blood clotting factors.
- **5.** Explain the role of oxalates and citrates in blood banks.
- **6.** Explain the role of bile juice in blood digestion.
- **7.** Describe the Ornithine cycle for urea formation.
- **8.** What is exopthalmic goitre?